

Work Order ID 149003 -1

Thursday, July 14, 2016 1:26:58 PM

149003

SP 67-2-

Page 1

Item ID: D3801-1

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Hand Retractable Spring Plunger

Start Date: 7/14/2016 Start Qty: 10.00

Required Date: 7/28/2016 Req'd Qty: 10.00

Reference:

DAS
21
9-89

10
10

3X

Cust Item ID:

Customer:

Approvals: Process Plan:

QC:

Date:

Date: JUL 14 2016

Tooling:

SPC (Y/N):

Date:

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code Accept Reject Reject Insp.
Qty Qty Number Stamp

Draw Nbr

Revision Nbr

D3801

B

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O:

33082

Purchase Part Number: KBP-504

Supplier: Essentra

Certificate of conformity is required

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.03

Packaging

Ensure material certification is attached

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

Ensure Material certification comply to Dwg D3801

DAS
13
9-89

210 JUL 14 2016

3x SP 16-7-26.

3

DAS
38
9-89

JUL 27 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

Work Order ID 149003

Thursday, July 14, 2016 1:26:58 PM

149003

Page 2

Item ID: D3801-1

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Hand Retractable Spring Plunger

Start Date: 7/14/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 7/28/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

130

Identify as per dwg & Stock Location: St034

0.00

130

Packaging

Memo

0.02

Packaging

3
DAS
6
9-89

JUL 27 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.17

Quality Control

DAS
21
9-89

AUG 03 2016

DAS
21
9-89

JUL 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Picklist Print

Thursday, July 14, 2016 1:27:03 PM

Page 1

Work Order ID: 149003

149003

Parent Item: D3801-1

D3801-1

Parent Item Name: Hand Retractable Spring Plunger

Start Date: 7/14/2016

Required Date: 7/28/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 08-07-22 new issue DD verified by:EC
12.03.06 AS PER DWG REV:B DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
KBP-504		Purchased	No			110	Each	0.0000	1	10 3X	3X		
KRP-504													
Hand Retractable Spring Plunger													

**

3X

Sp 16-7-26.

DQA: _____ Date: _____



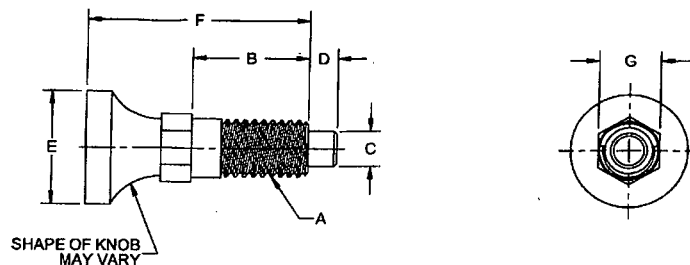
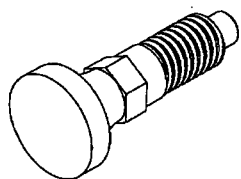
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 149003 MJS

16-07-14

D3801-X HAND RETRACTABLE SPRING PLUNGER

DART P/N	SUPPLIER	SUPPLIER P/N	'A' THREAD SIZE	'B' THREAD LENGTH	'C' NOSE DIAMETER	'D' NOSE LENGTH	'E' HEAD DIAMETER	'F' LENGTH	'G' WIDTH ACCROSS FLATS	MATERIAL (BODY/ NOSE)	MATERIAL (KNOB)	TYPE	END FORCE (lbs)	WEIGHT (lbs)
D3801-1	REID SUPPLY COMPANY	KBP-504	3/8-24 UNF	0.67	0.197	0.20	0.83	1.71	0.50	303 SS	BLACK DELRIN	NON-LOCKING	2.7	0.01
D3801-3	REID SUPPLY COMPANY	PRT-22 OR PRT-22N	1/2-13 UNC	1.00	0.313	0.25	1.00	1.90	0.52	303 SS	WHITE DELRIN	NON-LOCKING	1.75	0.02

△B

△B

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A

RELEASED
2012-03-02

B	SUPPLIER P/N CHANGED: BODY/NOSE MAT'L WAS STEEL NOW STAINLESS STEEL.		MB	12.02.24
A	NEW ISSUE		MB	08.06.19
REV.	DESCRIPTION		BY	DATE
DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN	DRAWING NO. D3801		REV. B	
CHECKED			SHEET 1 OF 1	
MFG. APPR.	TITLE		SCALE	
APPROVED	HAND RETRACTABLE SPRING PLUNGER		NTS	
DE APPR.				
DATE	12.02.24		COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33052

Purchase Order Date 7/14/2016

PO Print Date 7/15/2016

Page Number 1 of 2

Order From :

VC-ESS001

ESSENTRA COMPONENTS
P.O. BOX 9900 T-9915
POSTAL STATION A
TORONTO, ONTARIO M5M 2J2
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

RE JISE

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

FedEx Economy collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	S1475	Spring	7/20/2016 Yes 7/20/2016		10.00 Each	\$0.95	\$9.45

Line Total: \$9.45

2	KBP-504 ✓	Hand Retractable Spring Plunger	7/20/2016 Yes 7/20/2016		10.00 Each	\$24.46	\$244.60
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AS PER DWG D3801 REV. B
B149003 ✓

Rec'd 3x
8/16-7-26
Line Total: \$244.60

Note:

7/15/2016



Essentra Components
2538 Speers Road, Unit 7
Oakville, ON L6L 5K9
Phone: 905-825-0134
Fax: 905-825-2919
www.essentracomponents.com

Packing List
LOAD NUMBER 385777
SID/INV 40084963
CUSTOMER PO PO33052
ORDER NUMBER 2127591
CARRIER Fed Ex Ground
SHIP DATE 07/21/16
FOB DESCRIPTION INVOICE

SOLD TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

DELIVERY TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

LINE NO	PART NO. DESCRIPTION	ORIGINAL QUANTITY	QUANTITY SHIPPED	CTNS	NET WEIGHT	TOTAL WEIGHT
1	S-1475 .480 X .051 X 1.50 SPRING COMPRESSION Cust Order #: PO33052 Country Of Origin: US	10.000 ✓	10.000 ✓	10	.07	1.07
2	KBP-504 3/8-24 NON-LOCKING SS PULL INDEXING PLUNGER Cust Order #: PO33052 Country Of Origin: DE FED EX ACCT # 1517-9324-0	10.000	3.000	3	.13	1.13

SP/6-7-26

Certificate of Compliance

This is to certify that the above material shipped against your purchase order is in conformance with all known requirements, specifications and drawings in effect at the time of manufacture. All applicable physical, functional, dimensional and material test reports are on file at our facility, and may be inspected by your representative upon request.

Jeff Gillespie
Quality Assurance Manager